

# **DRAFT**

# **Lone Jack Lake**

# **Conservation Area**

**Ten-Year Area Plan**  
**FY 2015-2024**



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## OVERVIEW

- **Official Area Name:** Lone Jack Lake Conservation Area, # 8234
- **Year of Initial Acquisition:** 1983
- **Acreage:** 295 acres
- **County:** Jackson
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
  - A. Strategic Direction**

Lone Jack Lake Conservation Area (CA) is managed to conserve and enhance wildlife, grassland, woodland, and aquatic resources with an emphasis on grassland and woodland species and compatible recreational and educational opportunities. The area provides additional fishing opportunities in Jackson County.
  - B. Desired Future Conditions**

The desired future condition of Lone Jack Lake CA is healthy woodland, aquatic and grassland communities that include a diversity of habitat complexes along with agricultural fields with a reduced amount of invasive species.
  - C. Federal Aid Statement**

N/A

## GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
  - A. Priority Areas:** None
  - B. Natural Areas:** None
- II. Important Natural Features and Resources**
  - A. Species of Conservation Concern:** None observed.
  - B. Caves:** None
  - C. Springs:** None
  - D. Other:** Occurs in the Scarped Osage Plains Jackson County Prairie/Woodland Scarped Plain Landtype Association. This landtype consists of broad gently rolling uplands that give way to limestone valleys with up to 200 feet of local relief. Historically, the area contained prairie-covered uplands that graded into oak savanna, and then into unique woodlands dominated by chinquapin and bur oaks in the scarped areas. Some limestone glades were present. (Nigh & Schroeder, 2002).
- III. Existing Infrastructure**
  - 1 parking lot (Americans with Disabilities Act (ADA) accessible)

- 1 fishing jetty/platform (ADA accessible)
- 2 parking lots
- 1 fishing jetty
- 1 boat ramp to Lone Jack Lake
- Lake dam, outlet and emergency spillway
- 0.5 miles of asphalt road and parking area
- 1 fishing lake (35 acres)
- 1 fishing pond (less than 1 acre)
- 2 fishless ponds (less than 1 acre)

#### **IV. Area Restrictions or Limitations**

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** Northwest Central Pipeline Corporation pipeline easement (Figure 2)
- D. Cultural Resources Findings:** Yes, records kept with the Missouri Department of Conservation (the Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department's Resource Policy Manual.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** None observed.
- G. Boundary Issues:** None

### **MANAGEMENT CONSIDERATIONS**

#### **V. Terrestrial Resource Management Considerations**

Woodland management: Lone Jack Lake CA contains approximately 125 acres of woodland. Woodland management will be directed at maintaining a healthy natural community for wildlife habitat and recreational use. Management activities should occur in the northern portion of the area where better quality habitat and management opportunities exist.

Open land management: Prior to Department ownership, the area contained heavily grazed lands on steeper portions of the area and crop and hay fields on level areas. Today the area contains approximately 133 acres of open lands, which are old-field, prairie plantings and agricultural fields.

The northern woodlands on Lone Jack Lake CA can be separated into two general stands, divided by the pipeline easement:

- 1) Northwestern stand: Past management activities in this stand include woodland thinning and prescribed fire. High quality wildlife habitat consists of large diameter chinkapin oak, northern red oak, pin oak, post oak, walnut, persimmon, Kentucky coffeetree, green ash, hackberry, scattered hedge and other species.
- 2) Northeastern stand: A younger stand with trees of smaller diameter than the northwest stand. The stand consists of the same general species composition as the northwestern stand, and contains some large diameter bur and chinkapin oak trees.

### **Challenges and Opportunities:**

- 1) Permittee farmers produce agricultural crops on 35 acres (Figure 4) to help in the eradication of invasive Johnsongrass. Cropping also supplements natural food and provides cover to attract wildlife. This creates better hunting and viewing opportunities for area users. A crop rotation is used to reverse succession. It provides idle areas for ground nesting birds, food production in weeds (such as foxtail and ragweed) and insects to serve as food for a variety of birds.
- 2) Warm-season grass and forbs have been planted on 14 acres (Figure 4). They provide better species diversity and structure, nesting opportunities and early successional vegetation for a wide variety of species. The remaining open lands are old field areas. Recent management on these open lands included the use of prescribed burns, mechanical disturbance and herbicide application. Management efforts have been directed at improving the quality of the grasslands and old fields by keeping invading woody vegetation and fescue in check.

**Management Objective 1:** Maintain healthy trees and woodlands with management emphasis on wildlife habitat.

**Strategy 1:** Monitor woodlands for invasive exotic vegetation, diseases and insects. Suppress any infestations that may develop.

**Strategy 2:** Retain and protect existing den trees.

**Strategy 3:** Thin the northwest stand favoring hard mast-producing species. Use small group openings in areas where poor canopy species composition occurs to stimulate grasses and forbs.

**Strategy 4:** Use methods to stimulate groundcover and reduce woody competition in the understory.

**Management Objective 2:** Provide food and cover for wildlife and maintain early successional vegetation.

**Strategy 1:** Provide supplemental food through crop and idle field rotation.

**Strategy 2:** Manage prairie plantings and old fields using appropriate methods to maintain early successional habitat.

**Strategy 3:** Eradicate any known infestations of sericea lespedeza, fescue and Johnsongrass. Monitor area for new infestations and for other invasive exotic species. Suppress any infestations that may develop.

**Strategy 4:** Maintain field borders to create edge habitat.

## **VI. Aquatic Resource Management Considerations**

The conservation area contains one 35-acre lake, ephemeral streams, one fishing pond and two fishless ponds (Figure 3).

### **Challenges and Opportunities:**

- 1) The conservation area includes nearly 0.8 miles of ephemeral streams; one was dammed to create the 35-acre fishing lake. The streams should be monitored because land uses in the surrounding area are changing and most of the stream headwaters occur outside of the conservation area.
- 2) The area has two fishless ponds (both less than 1 acre), which are used primarily as wildlife watering holes.
- 3) The small fishing pond (less than 1 acre), called Cave Pond (named after a local family), contains largemouth bass, catfish and bluegill.
- 4) The 35-acre fishing lake is accessed by the paved boat ramp, located at the main parking area. There are also two fishing jetties that are adjacent to the main parking lot; one is paved and is ADA-accessible; the other is graveled. The lake receives a lot of fishing pressure due to its proximity to the Kansas City metropolitan area. The lake contains populations of largemouth bass, bluegill, redear sunfish, green sunfish, crappie and channel catfish.

### **Management Objective 1:** Monitor ephemeral streams and their riparian corridors.

**Strategy 1:** Monitor and mitigate current field road/fireline use in the riparian corridor along the ephemeral streams.

**Strategy 2:** Monitor potential impacts caused by increased runoff due to changing land cover within the watershed.

### **Management Objective 2:** Maintain two fishless ponds.

**Strategy 1:** Monitor ponds for invasive exotic species. Suppress any infestations that may develop.

**Strategy 2:** Provide suitable habitat for amphibians and reptiles in ponds with no fisheries management potential.

**Strategy 3:** Monitor and facilitate the dam maintenance according to Department maintenance guidelines.

**Management Objective 3:** Maintain one fishing pond (Cave Pond).

**Strategy 1:** Monitor pond for invasive exotic species. Suppress any infestations that may develop.

**Strategy 2:** Monitor fish population and adjust regulations and stockings as needed.

**Strategy 3:** Monitor and facilitate the dam maintenance according to Department maintenance guidelines.

**Management Objective 4:** Maintain a 35-acre fishing lake (Lone Jack Lake).

**Strategy 1:** Monitor the lake for native and invasive exotic species. Manage native plants, as needed, and suppress any invasive exotic species infestations that may develop.

**Strategy 2:** Monitor and facilitate the dam maintenance according to Department maintenance guidelines.

**Strategy 3:** Monitor fish population and adjust regulations and stockings as needed.

## **VII. Public Use Management Considerations**

### **Challenges and Opportunities:**

- 1) Located just outside the greater Kansas City Area, the conservation area is open to shotgun hunting with shot-only firearms hunting and archery-only deer hunting. The area offers a place close-to-home to hunt deer and turkey for many residents in the Kansas City metro area.
- 2) Due to its proximity to the City of Lone Jack and the Kansas City metropolitan area, the area offers outdoor educational opportunities for nearby schools and youth groups.
- 3) The conservation area is also located near agricultural lands, small farms (5 to 10 acres) and housing developments.

**Management Objective 1:** Provide public hunting and wildlife viewing opportunities.

**Strategy 1:** Conduct annual management activities that will provide habitat for a diversity of species.

**Management Objective 2:** Improve educational and interpretive opportunities at the conservation area.

**Strategy 1:** Communicate the area's recreational opportunities and outdoor educational opportunities to school groups, scouts and the public (e.g., using brochures, Missouri Atlas database, etc.).

**Strategy 2:** Provide outdoor educational opportunities (e.g., workshops) for school classes, scout groups or youth groups.

**Management Objective 3:** Facilitate a good working relationship with neighboring land owners.

**Strategy 1:** Work with neighbors to minimize any boundary or trespass issues, or the occurrence of illegal activities on the conservation area.

**Strategy 2:** Promote habitat management on neighboring landowner properties.

## **VIII. Administrative Considerations**

### **Challenges and Opportunities:**

- 1) Maintain area infrastructure at current levels.
- 2) Acquisition of land

**Management Objective 1:** Maintain area infrastructure at current levels.

**Strategy 1:** Maintain area infrastructure in accordance with Department guidelines.

**Strategy 2:** Follow dam maintenance according to Department maintenance guidelines.

### **Lands Proposed for Acquisition:**

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

## **MANAGEMENT TIMETABLE**

All strategies for this management plan are considered ongoing.

## APPENDICES

### Area Background:

Lone Jack Lake Conservation Area is located in southeastern Jackson County, 1 mile northwest of the City of Lone Jack on Brown Road.

The area is located in a region rich in Civil War history. The Battle of Lone Jack was fought Aug. 16, 1862, within the city limits of Lone Jack.

The Department purchased this 292-acre tract in 1983 to develop a lake site and provide additional fishing waters in Jackson County. A dam was constructed in 1985 and impounds 35 acres of water. Fingerling largemouth bass, bluegill, and channel catfish were stocked and the lake was opened to the public for fishing in 1989.

Infrastructure around the lake includes a concrete boat launching ramp and two fishing jetties (one is ADA accessible). Both the entrance road and the primary parking lot are paved with asphalt.

Woodlands, cropfields, and native grasses are managed to provide year-round food and cover for a variety of game and non-game wildlife species. Haying and controlled burns are used to maintain plant diversity in open areas. Habitat plantings include native trees, shrubs and grasses. A variety of waterfowl use the area for nesting and wintering. The area also supports populations of deer, wild turkey, quail, rabbits and squirrels.

### Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Woodland	125		42
Old field/grasslands	84		29
Impounded water	37		13
Cropland	35		12
Prairie plantings	14		4
<b>Total</b>	<b>295</b>		<b>100</b>
Ephemeral stream frontage		4,066	

### References:

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

**Maps:**

- Figure 1: Area Map
- Figure 2: Aerial Map
- Figure 3: Topographic Map
- Figure 4: Current Vegetation Map

Figure 1: Area Map

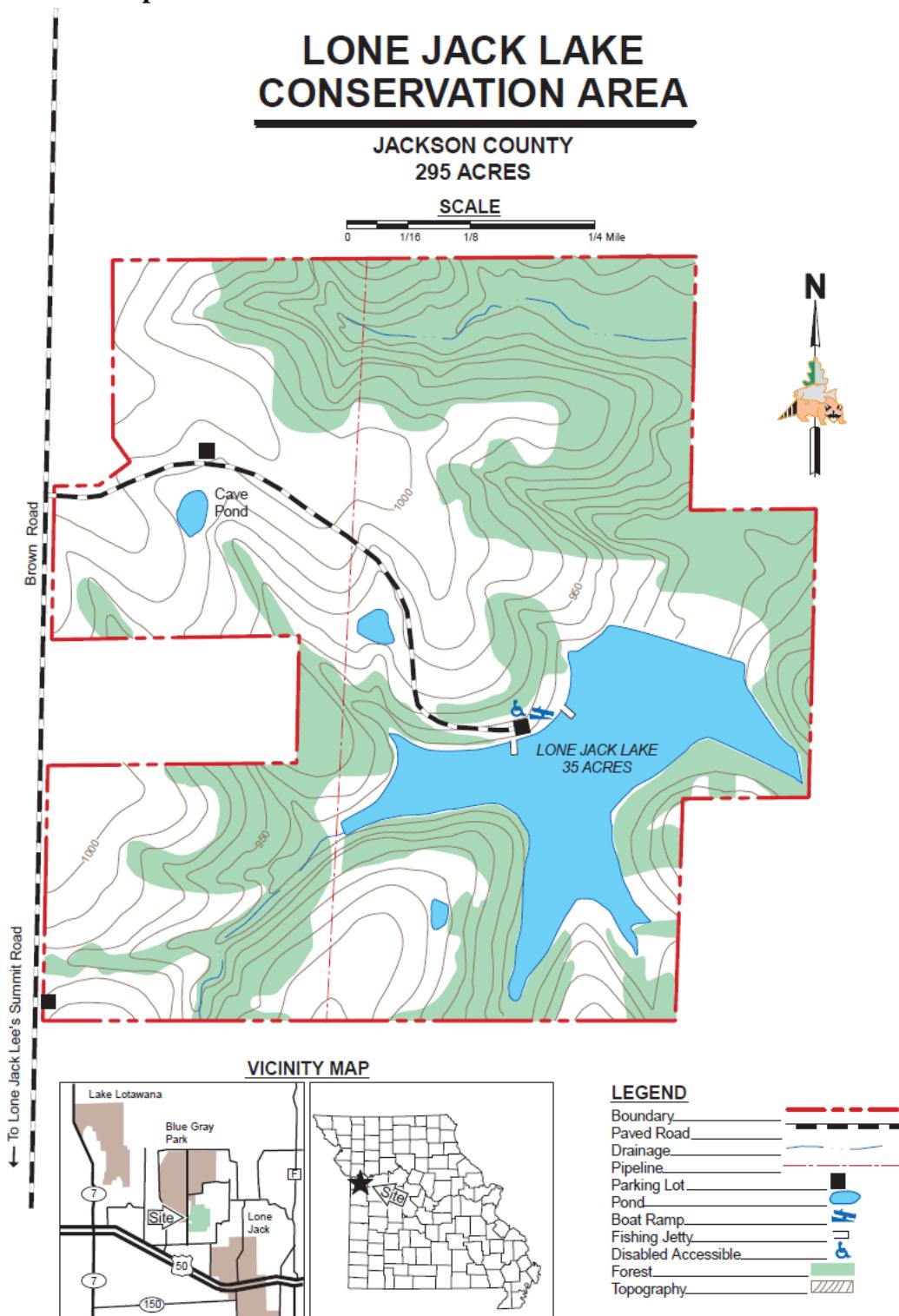


Figure 2: Aerial Map

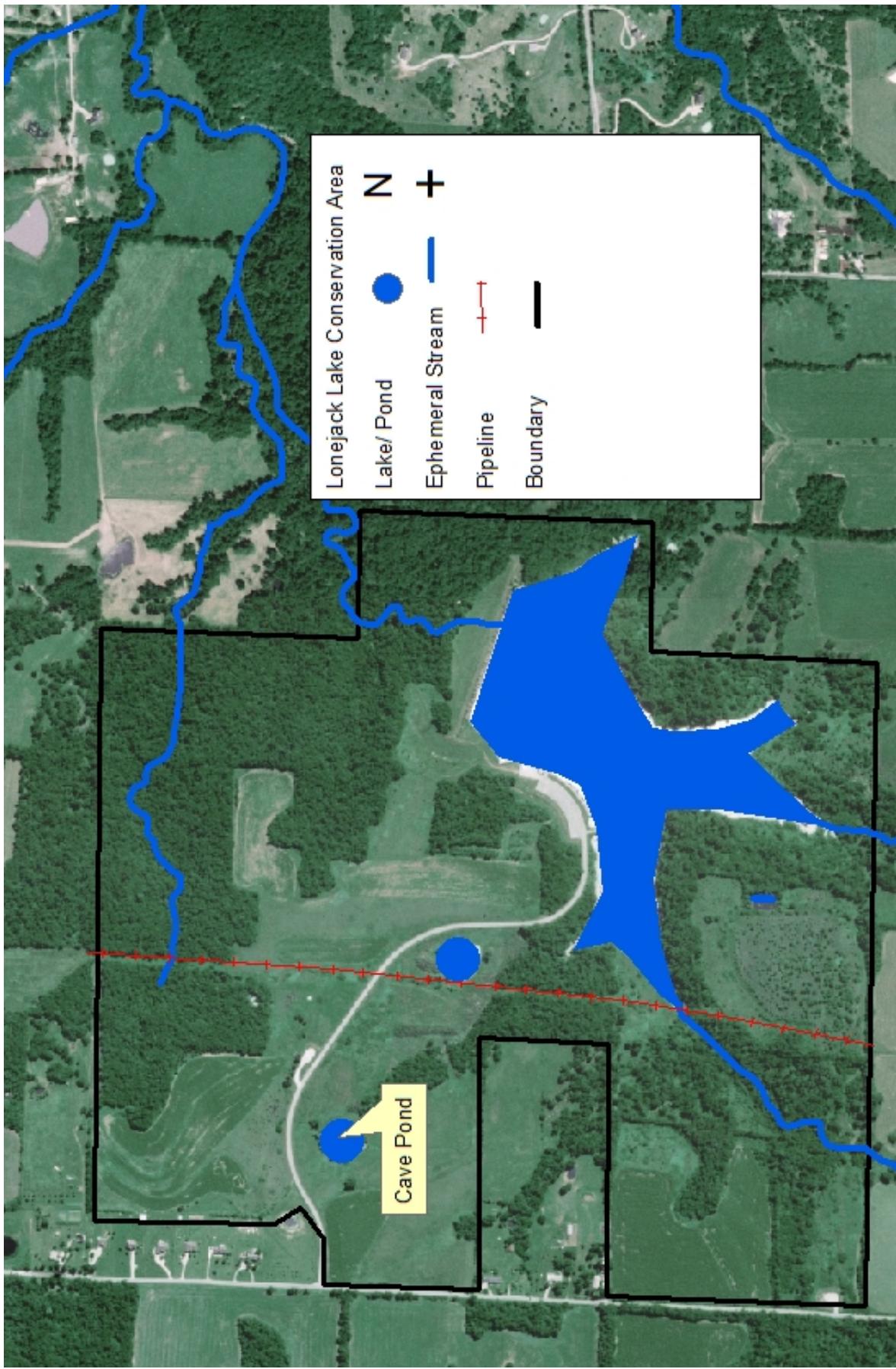


Figure 3: Topographic Map

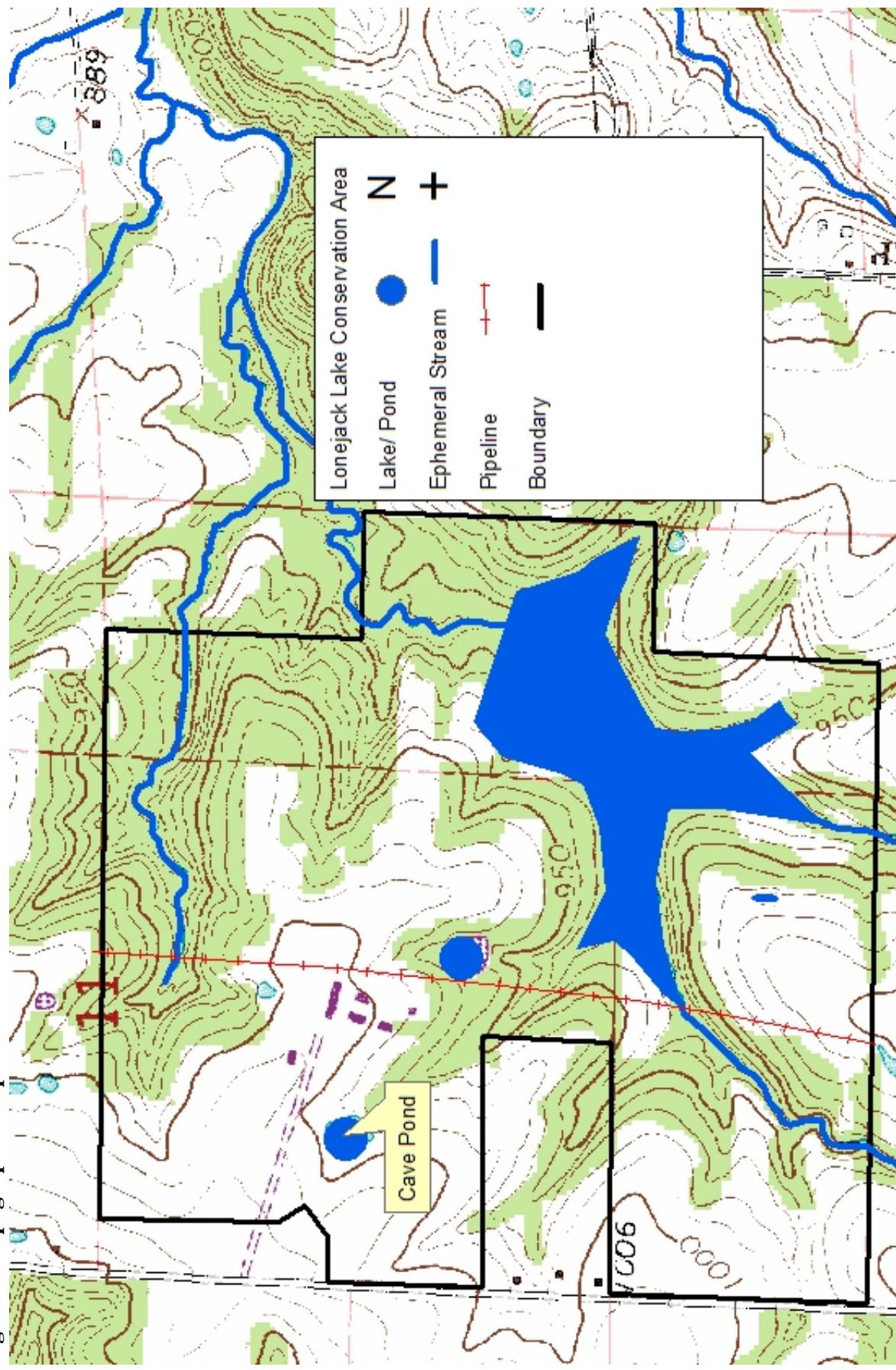
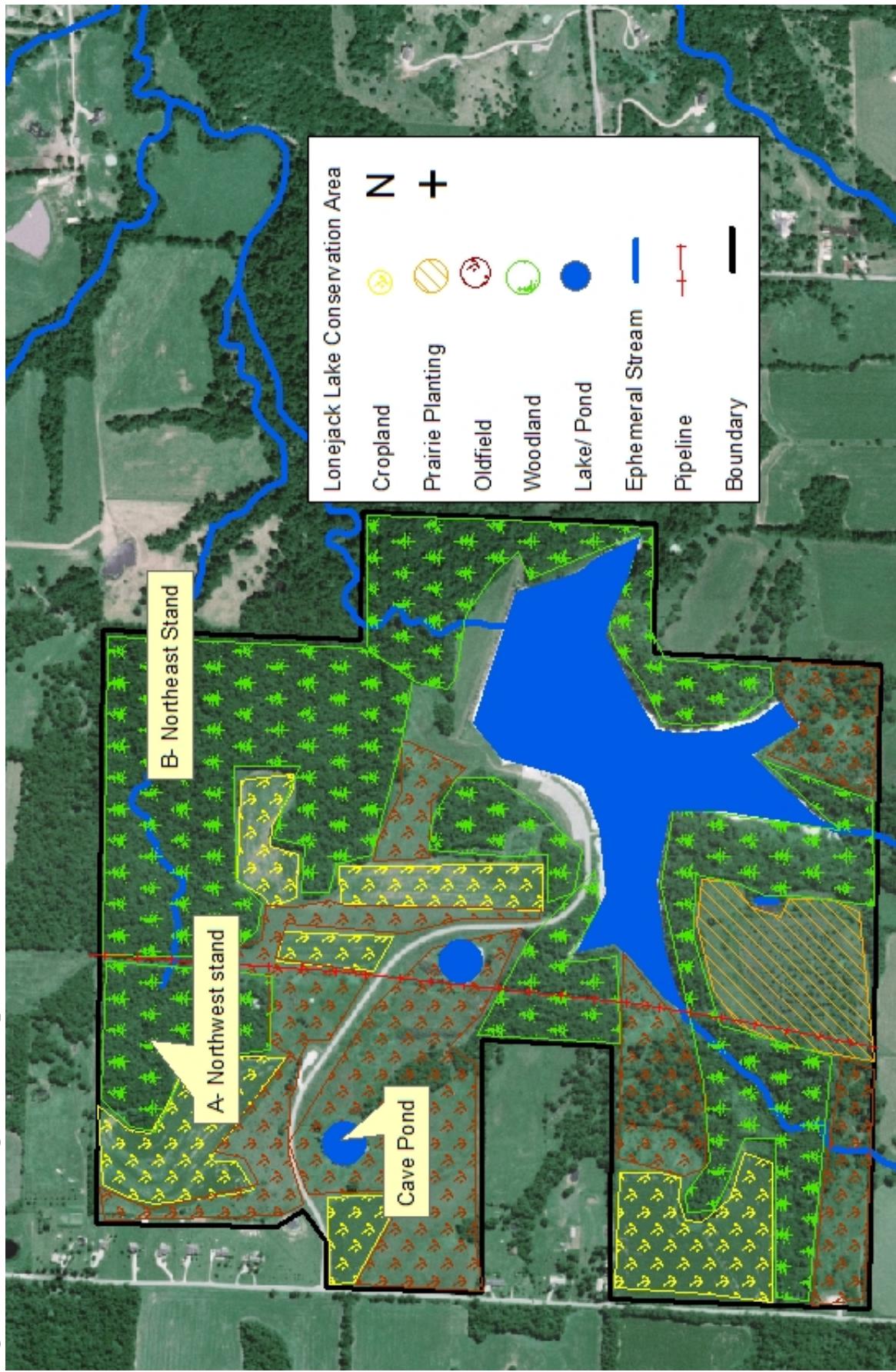


Figure 4: Current Vegetation Map



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